Technology Training Center (One-Stop Shopping)
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Abstract:
Providing internal technical education and training in all campus-supported applications creates an avenue for staff and faculty in every corner of the University to stay current with changing technologies. This also allows for the customization of technology to campus needs and advances at a pace suitable to the growth within the organization. Most colleges have a broad base of technical expertise. Through a good cross-over training structure this expertise is being tapped, creating a low-cost training center which will improve efficiency and productivity campus-wide.

A centralized internal training facility not only promotes the best possible use of current resources, but makes training sessions more frequent, more consistent, cross-functional, interdisciplinary, and in general more convenient to the campus user community. Sessions may be designed for a variety of skill levels, and lead to the establishment of a faculty/staff technical skills matrix. After establishing campus skills standards, this facility will be in a position to determine the training needs of the campus as a whole, thus enhancing employee productivity.
Technology Training Center (One-Stop Shopping)

A university finds that a centralized internal training facility not only promotes the best possible use of current resources, but makes training sessions more frequent, more consistent, cross-functional, interdisciplinary, and in general more convenient to the campus user community.

Veronica approached Ron one morning with a wonderful new idea. It was a brilliant plan – one of those that makes other people wonder why they’d never thought of it before. Ron gave her idea his full support, and asked for a report he could present to the dean of his college first thing the next morning – timing was crucial, he explained. In a frenzy of excitement, Veronica set all of her other work aside and spent the day composing and perfecting her report, handing her disk to Ron late that afternoon. The next day she asked Ron if her plan had been approved. He replied dejectedly that the word processing software in the dean’s office was totally incompatible with hers – they were unable to find a system capable of reading the disk until after the dean had left for an important conference in Europe...

Connie was justifiably proud of the new equipment that her office had just received. Brand-new, state-of-the-art, very expensive – this would make her life so much easier. She sat down at the keyboard to begin her weekly report. But the statistical software that came with her new computer was not what she was used to. In fact it was completely different. The instruction manual was three inches thick and appeared to be written in French. Connie placed a few calls and found out that there was a course she could take that would teach her how to use the program. The next session would be held in three months...

Carlos was almost finished entering the information from a foot-high stack of vouchers when his keyboard froze and a message appeared at the bottom of his screen. FATAL INPUT ERROR. PLEASE PRESS & BWN~JADUW@. He called the help desk immediately and reported the problem. The technician said, “Oh no. Please don’t tell me that you hit the F3 key without filling in the last field.” Yes, that was exactly what Carlos had done. “I’m afraid that you’ll have to reboot the machine and start over,” the technician said. “There’s nothing I can do to help you. Didn’t they warn you about that in training?” No, they hadn’t. His department had hired a trainer from off-campus, someone who wasn’t familiar with the quirks of the university mainframe...

The Problem: Too Much Communication Technology. Too Little Real Communication

Many universities encounter situations like these on a daily basis. The traditional, decentralized structure prevalent in academic institutions encourages departments to act almost as self-contained units. This arrangement is, of course, essential for preserving academic freedom. When extended to the implementation of information technology, however, it creates a breeding ground for the problems described above. Imagine what would happen if a handful of separate groups, working in total isolation from one another, were each to purchase a computer system that met their particular needs – and then were told to make them all work together. As if this weren’t enough chaos, imagine that each group was responsible for ensuring its employees were properly trained. Some departments, of course, might do this very well, creating and maintaining a high standard of internal training; others would probably provide only infrequent training sessions or count on outside sources. Still other departments, for one reason or another, might offer no training at all.

How could such an organization expect to reap the benefits of the Information Age, sharing its visions and discoveries with the world, when its own departments can’t even communicate with one another?

In the fall semester of 1994, The University of Texas at El Paso found itself in this very situation. Years of departmental isolation had created an environment in which the growth of technology was sporadic and eclectic -- it was not unusual to find some offices lavished with the latest in cutting-edge technology while others carried on, quite contentedly, with typewriters and carbon paper. This, combined with a marked inconsistency in the availability and quality of technology training, produced a never-ending string of difficulties for the campus’ technical support departments.
Sure, our systems interface. We just need a third system to translate.

The staggering variety of platforms, applications, and software packages in use on campus created almost insurmountable problems for technical support services, especially when these systems were made to interface with one another.

We have the training you need. Later.

Training sessions were hard to come by for most applications. Most of what was available was presented near the beginning of the academic year, for the benefit of new employees, and repeated only once or twice throughout the year. The only regularly scheduled IT training was for specialized campus systems, such as the financial and academic databases.

Hello, I’m Xmectoq, from the Crab Nebula. I’ll be your trainer today.

Many users had to go to outside sources for any kind of professional-level software training. These “outsourced” training sessions typically required a full-day’s absence from work, travel to an off-campus location, and the payment of a registration fee. Even though the presenters of these sessions were generally competent to teach in their particular application or field, they were often unfamiliar with the special needs of campus users, and almost never available for any form of post-training support.

This combination of circumstances, quite naturally, prevented the campus’s electronic resources from growing and flourishing. The maintenance of old and incompatible systems was becoming more expensive by the year, requiring the use of funds which might otherwise have gone to the purchase of newer equipment. But, more importantly, the general level of technical expertise among the university’s faculty and staff was increasingly found to be insufficient for the performance of daily job duties. Not only were untrained employees less capable of making an adequate use of available technology, but occasionally presented grave institutional risks. For example, the security of confidential and financial information was put in jeopardy when administrators who were unable to fit training into their schedules handed over to secretaries and assistants the responsibility for approving electronic documents.

The management of Customer Technology Services (CTS), an IT support division at the university, set about devising a plan which would address many of these issues – not by attacking them one at a time, but by dealing with the problem at its root.

The Solution: A Centralized Training Facility

The source of so many of the problems that CTS was facing was the decentralized approach to technological implementation. The tendency of individual departments to consult outside sources instead of one another in their development of IT resources had somehow to be curbed. The simplest response, therefore, was to somehow create a reliable and convenient source for information on current technology. The solution that the CTS managers devised was the creation of a centralized source of technology user training. Such a facility could provide frequent, standardized training in those areas most needed by campus users, taught by personnel knowledgeable in the ins and outs of the system, and working in full cooperation with university technical support services.

After mere months of preparation, and at almost no cost to the university, the Information Technology Training Center opened its doors, offering training in a variety of supported campus applications. This resource is open to all university faculty and staff members, regardless of department or job classification. No fees are charged. Classes are repeated frequently, some as often as twice a week, and offered during both morning and afternoon hours. Training sessions are all under two hours’ duration, centrally located on campus, and taught by experts from the CTS staff. Documentation and follow-up support are also available.

With this simple step, CTS has effectively reversed many of the trends described above. Technology training has become convenient, uniform, and wholly in touch with campus user needs. Individual departments, knowing the resources now available to them, are more willing to discard their antiquated computer systems in favor of hardware and software that complies with current campus standards. The employees themselves have been empowered – given the tools to solve many of their problems without
having to rely on the assistance of support staff – thereby becoming more valuable assets to their department and to the university.

**Step One: Ask the Customers**

Obviously only a very large facility could hope to provide training for every software application in use on a sizable university campus. To keep costs minimal, therefore, the planners must limit the number of applications for which training will be offered. This may be done effectively by conducting an assessment of the campus technology users to ascertain which programs are most commonly used, and for which programs users most in need of training. Once these results of this needs assessment have been gathered and analyzed, they should be observed carefully in the development process. The planners, working in close coordination with the technical support staff, might even go so far as to agree that only those applications in which training is offered will be fully supported by the IT customer service department.

Other information which should be solicited from the user community is a basic idea of what users expect from a training facility. Essentially, once training is available in the desired area, what can be done to make it more convenient and more appealing to campus users? The results of this inquiry should be adhered to as faithfully as the first in the planning of the facility.

Customer Technology Services utilized a variety of tools in surveying customer needs. A number of users, chosen at random, were contacted by phone and asked for their input. Needs assessment surveys were distributed to members of campus technology user groups and to those in attendance at existing training sessions. CTS paid special attention to input from those campus departments whose need for unified technology was greatest – Human Resources, Purchasing, Accounting Services, Student Admissions, and other processing departments. The responses to these inquiries once analyzed, laid the foundation, physically and ideologically, for the new facility.

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<th>“Just-In-Time” Training</th>
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<td>Campus technology users want training which will help them to get started in a particular application. They want their basic questions answered, a few tips and shortcuts to help them use their time more effectively, handouts to help them retain what they’ve learned, and a good source of post-training support. Anything beyond this is generally too much information – someone taking a course on using a word processor will generally not need to know how to program macros in order to get their work done. Also, few people have the time to investigate new programs and compare various software packages – they want someone else to do this for them.</td>
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<td>Training courses were designed to provide the users with as much useful information as possible in a short amount of time. Sessions are available in basic and intermediate levels for many applications, and some even extend to the advanced level. No course is over two hours in duration, including a question-and-answer period. CTS trainers also take great care to remain current with new software packages and to be able to make recommendations to trainees.</td>
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<td>Users don’t want to have to wait six months before a training course is repeated, and don’t want to have to register a semester in advance. Trainers should be interesting, with good presentation skills as well as technical knowledge. The training atmosphere should be conducive to learning – comfortable and quiet with a minimum of distractions. Users like training sessions which provide hands-on experience, so computers should be available for the students as well as the trainers. In addition, they like having a voice – satisfaction surveys distributed after a session allow users to express their opinions on the quality of the information they have received and the manner in which it was conveyed.</td>
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<td>The frequency of course offerings depends entirely on demand. Some courses are offered as often as two or three times a week, while others are held once or twice a month. CTS uses trainers who have demonstrated strong presentation skills. Satisfaction surveys distributed after every session allow trainers to hone their skills and make adjustments as needed. The IT Training lab provides an excellent learning environment – no more than 9 students are trained per class, and each student sits in front of a computer to participate in hands-on training exercises. Customers can register for training up until the day before the session. They may do so either by calling</td>
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Step Two: Cooperate With Existing Training Programs

The establishment of a centralized IT training facility does not in any way require the dismantling of existing training programs. On the contrary, such a facility is far more effective when it works in alliance with other campus departments – the process of course development, always a time-consuming task, is essentially eliminated for many supportable applications in this way. Partnerships with other campus trainers can also yield further valuable insights into user needs and new developments, assist greatly in the promotion of universal standards, and allow a better utilization of existing resources.

It is entirely conceivable that some departments will be eager to hand over the responsibility of employee training to a central facility. Some areas of campus will have more limited resources than others, and to many of these the reduction in responsibility will be a welcome relief. At the same time, however, other departments will react quite differently. The political realities of the academic world do not always bring about the most beneficent of inter-agency relations, to put it mildly. Planners of a centralized facility must take great care to tread lightly in such cases and to ensure that no needless antagonism arises.

In planning the IT Training Center, CTS consulted various computer labs and training facilities across the UTEP campus. Personnel from these other areas were invited to assist in the areas of customer needs assessment, course development, and post-training support. Some individuals, for example, agreed to serve as back-up trainers. A healthy spirit of cooperation has prevailed, with a firm emphasis on meeting and even exceeding the needs of the user community.

Step Three: Consult Technical Support Staff

IT support staff members work closely with the customer, and thus have a very good idea of the user community’s most pressing needs – a better idea, in fact, than most customers. Also, the support staff has much to gain from the success of the facility. First, the number of calls placed to IT support requesting assistance with software problems should drop sharply, particularly if, as mentioned above, only those applications in which training is available are supported by IT services. Second, the trainers form a ready base of secondary (and in many cases) primary assistance for software related questions, again relieving the burden from other areas such as the HELP Desk. Third, support personnel can be assured that customers who have been trained by the centralized facility will have received information that is consistent and correct. Fourth, staff members within the IT support department may also take advantage of the opportunity to train in different areas, thus expanding their own knowledge base as well as their own horizons.
Step Four: Ready…Set…Action!

Once the planners of the CTS IT Training Center had gone through these previous steps, they felt certain that they had a genuine grasp on the needs of the campus technology user community, and utilized this perspective in the actual creation of the facility.

They started with a computer lab which was already in existence, and created a second one nearby from older computers acquired at minimal cost. These facilities could hardly have been described as cutting-edge, but they accurately reflected the sort of equipment that employees from throughout the campus might typically use.

Once the actual facility was created, the planners developed a schedule of classes, designed to provide more frequent offerings for courses that were in high demand. These were coordinated with the trainers’ individual schedules as well.

CTS designed, produced and distributed to every single university employee copies of a training catalog. These contained a full listing of all courses, descriptions of each, and instructions for registration.

The final step in this process, once classes have begun, is that step which never ends…the constant effort to improve. Customer satisfaction surveys are distributed after every session, allowing the trainer to make better use of his or her strengths and minimize weaknesses. Plans are constantly being made for the introduction of new courses as they are needed.

Results

The Information Technology Training Center on the UTEP campus has been a resounding success. In a very short time CTS has given many campus departments the incentive to migrate to a more universal standard, improving the potential of employees all over campus to be more productive in their work. Just a few of the benefits this facility has brought to the campus are listed below.

Cost savings

One training center is much more economical than five or six separate labs, requiring fewer purchases of new equipment and fewer new employees hires. Campus technology users who have been well trained will make better use of available technology, becoming more productive. Departments which migrate to systems supported by the campus will save vast amounts of money which might otherwise have been spent on maintaining older, non-compatible technology.

Quality training

A single facility is more likely to provide consistency in its training offerings, and is more effective in disseminating technical knowledge throughout the entire campus user community. Unlike departments which offer training sessions twice a year or contract out to off-campus services, a centralized facility is capable of gathering frequent input from the customer base and using this input to make constant improvements and enhancements to its training programs.

Follow-up services

Technical support services are much easier to provide when the trainers are a permanent part of the support team. Those who are on the front lines of day-to-day customer support generally have a clearer perspective of the problems users face and are accustomed to addressing them. Furthermore, users can call their trainer themselves and ask them questions.

Information Security

A centralized facility will improve security, especially in the areas of campus-wide networks. Only those who have gone through the official training sessions are granted access to administrative, financial and academic networks.
New Services

It is one thing to encourage campus users to migrate to more supportable systems, something else entirely to assist them in that transition. The Technology Corner is a facility which makes it even easier for UTEP departments to migrate to systems which meet new campus standards. The Technology Corner acts as a purchasing agent, providing quick information and rapid turn-around times on purchases of hardware and software, at the lowest possible market prices. By eliminating the complexity and delays associated with the purchasing process, CTS makes the incentive to upgrade even stronger.